

Abstract of the disclosure

5 A duplexer comprising a transmit resonator device and a receive resonator device for filtering transmit and receive signals. The resonator device has a first BAW resonator for generating an acoustic wave signal from an input electric signal, a first acoustic delay
10 for delaying the acoustic wave signal, and an intermediate BAW resonator for receiving the delayed acoustic wave signal at one end and converting the delayed acoustic wave signal to an electric signal. Through electrical coupling, the electric signal also appears at another end of the intermediate BAW resonator for generating a further acoustic wave signal at the other end. The resonator further comprises a second delay for delaying the
15 further acoustic wave signal, and a second BAW resonator for producing an output electric signal from the delayed further acoustic wave signal. The duplexer can be used in a transceiver in a mobile phone.